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REMARKS

Responsive to the outstanding Office Action, reconsideration is respectfully requested in view of the following:

Interview Summary

The undersigned wishes to thank Examiner Dennison for discussing this matter by telephone on two occasions on December 7, 2005, and further wishes to make such discussions of record. During the first discussion, the undersigned asked Mr. Dennison for clarification on the current issue with the term "Operating System". The undersigned offered to clarify and/or provide arguments and evidence of the meaning of the term. This has been done below. Mr. Dennison, in consultation with his SPE further indicated that his SPE wishes to have the claims clarified to assure that the distinction between the Operating System and the Boot Code is clear. In this regard, Mr. Dennison's SPE wishes for the claims to be amended to reflect that the Operating System is not present on the client device at the download. The undersigned is happy to comply with these requirements, and submits that the claims are in condition for allowance in view of the above amendments and the remarks that follow.

Regarding the term "Operating System"

Applicant appreciates the Examiner's detailed explanation in the Office Action and the above-noted telephone discussions of the interpretation of the term "operating system", and respectfully submits that the Examiner's interpretation of "operating system" as "instructions that enable application programs to work on hardware" is simplistic and overly and unreasonably broad. Moreover, this definition misquotes Applicant's specification and is contrary to accepted definitions of operating systems. The following is submitted per the above telephone interviews in support of Applicant's contention that the term is well established and should be interpreted differently than the Examiner proposes.

The undersigned wishes to bring to the Examiner's attention to the specification page 2, lines 6-9. This is approximately the point in Applicant's specification where the term is first introduced. At this point, examples of operating

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systems such as Windows, Aperios, Linux, etc. are given. These examples are consistent with common definitions and use of the term. Several example definitions and their sources appear in an APPENDIX to this response. Applicant wishes to note that the examples cited in these definitions are consistent with the examples provided by Applicant. Furthermore, these examples are consistent with the common understanding and use of the term "operating system". Moreover, the definitions provided are consistent with Applicant's use of the term, and in one definition the distinction is drawn between the OS and boot code. In view of this evidence, it is submitted that the interpretation of the term being given by the Examiner is outside the bounds of a "broadest reasonable interpretation". Reconsideration is therefore respectfully requested.

The Office Action submits that disclosure of download of "environment variables" in Heath is within the interpretation of the term "operating system". According to this definition, not only environmental variables but virtually every element of code that is necessary to permit an application to function would appear to be within the scope of the term "operating system". Clearly, this is an interpretation that is overly broad and inconsistent with conventional use, Applicant's use and examples, and standard definitions. Reconsideration of this unreasonably broad interpretation of the term is respectfully requested.

Regarding the claim amendments

In light of the above telephone interviews, the undersigned submits amendments to the independent claims as follows:

Claim 1 – The claim now clarifies that the boot code is incapable of running the application (distinguishing it from the Operating System) and further clarifies that the Operating system is not installed on the client device at the time of download. This claim is further amended to clear up potential confusion in antecedent basis by deleting the term "desired".

Claim 10 – The claim now clarifies that the boot code is incapable of running the selected application (distinguishing it from the Operating System) and further clarifies that the Operating system is not installed on the set top box at the time of

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initiating the download. Certain language clarification has also been made in order to assure clarity and proper antecedent basis.

Claim 18 – The claim also now clarifies that the boot code is incapable of running the selected application (distinguishing it from the Operating System) and further clarifies that the Operating system is not installed on the client device at the time of initiating the download.

Claim 26 – The claim also now clarifies that the boot code is incapable of running the selected application (distinguishing it from the Operating System) and further clarifies that the Operating system is not installed on the client device at the time of initiating the download.

These amendments are supported generally by the specification, and in particular, at least in the following locations: page 2, lines 14-16 and 19-20; page 5, lines 4-18 and Table 1; page 6, lines 1-15; page 7, lines 1-2; page 8, lines 2-5 and 18-22; page 8, line 27 – page 9, line 4; page 9, lines 22-24; page 9, line 26 – page 10, line 14. Further, the flow charts of Fig. 2 and 4 clearly indicate the limited functions of the boot code and make it evident that at least one of the applications to be downloaded cannot run on the boot code without benefit of an associated operating system.

Claim Rejections – 35 USC §103

Claims 1, 10, 18 and 26 were rejected as obvious in view of Heath. MPEP 2143.03 requires that "[t]o establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)." In the present instance, certain claim features are neither present nor suggested by the Heath reference. Consider claim 1 which is repeated below for reference.

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	CLAIM 1	REMARKS
1.	On a client device capable of operating using a plurality of operating systems on which a plurality of applications run, a method of downloading an operating system and an application which runs on the operating system, comprising:	No disclosure or suggestion in Heath of use of multiple operating systems. No teaching or suggestion of downloading an operating system. No suggestion of an ability to run multiple operating systems.
2.	a boot code of the client device providing a menu of selections representing a plurality of available applications including said application, wherein the boot code is incapable of running said application;	Heath, at col. 2, lines 50-55 is silent on display of a menu of selections of applications associated with a plurality of available operating systems. Heath merely discloses a launcher program that loads on bootup, with such launcher being used to automatically update an existing program (i.e., one already loaded on the system).
3.	receiving a signal representing a user's selection of said a desired application;	Heath, at col 2, line 65- col. 3, line 5 discloses user selection of an application to update. At col. 6, lines 10-15, Heath only discloses that the user can select an application for execution or updating. Such applications are already loaded (as is the Operating System) and are to be updated.
4.	responsive to receiving the signal, the boot code activating a download manager of the client device; the download manager managing a download of the operating system associated with the desired application and the desired application in a manner transparent to the user with no input from the user, further comprising:	No teaching or suggesting of download of an operating system associated with the selected application.
5.	connecting to a service provider;	
6.	downloading the operating system associated with the desired application from the service provider, wherein the operating system associated with the application is not already installed on the client device at a time of the downloading;	Heath only discloses download of application and associated "environment variables". While such environment variables may be needed for the program to operate, they cannot by themselves be considered to be or to suggest downloading an operating system – that is, if only the application

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		and environment variables are loaded into a processor, the application program will not run. As amended, note that the OS is already installed in Heath — there is no suggestion that it can be otherwise.
7.	downloading the ~~desired~~ application; and	
8.	installing and executing the operating system and the ~~desired~~ application.	Any execution of the operating system is execution of the user's existing operating system.

Thus, Heath falls short of disclosing or suggesting all claim features of claim 1 (as originally presented and as amended), as required to establish obviousness. The same analysis can be carried out for claims 10, 18 and 26, with Heath exhibiting the same or similar deficiencies.

The Office Action correctly notes that Heath does not explicitly state downloading and installing an operating system. The download of code such as environment variables and components is clearly not the same as downloading an operating system. Environment variables are defined in col. 5, lines 19-27 and col. 6, lines 34-36 as system wide parameters storing small items of information shared by multiple applications, or that provide instructions as to how application components are installed on a client. Hence, such environment variables are not necessary components of an operating system. Instead, they are specific to one or more application programs being updated in accordance with Heath's update process. While it is presumably possible for environment variables to be incorporated into an operating system, this does not suggest Applicant's invention as claimed.

In Heath's patent, the operating system is established. It is submitted that Heath fails to provide a disclosure adequate to suggest Applicant's claims because the entire disclosure of Heath is focused on updating or upgrading of an application program. Such application program is apparently already installed on a client system, and is to be updated. This necessarily implies that the operating system is also already in place and has already been selected (by whatever mechanism). As such, the mere fact that environment variables may be upgraded during an update of an application program carries with it no suggestion of download of an associated operating system as required by the claims.

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The Examiner is asked to carefully consider the environment in which Heath operates. In such an environment, a client – server environment in which the goal is to maintain existing application programs (see abstract), Applicant finds no suggestion that an operating system should be downloaded in order to maintain an application or make an application compatible. This is contrary to the normal mechanism in which general purpose computers are operated and maintained. Selection of an operating system is not made based upon a program which is selected by the user. Rather, the operating system is installed and the user selects application programs based upon those available for operation on the existing operating system. Selection of an application program, and having that application program be associated with an operating system that is downloaded after selection of an application program is contrary to this conventional operation.

In view of the above, it is believed clear that claims 1, 10, 18 and 26 are not obvious in view of Heath. Reconsideration and allowance are respectfully requested.

Claims1, 7, 10, 18, 26 and 29 were also rejected as obvious in light of MacInnis of record. Applicant respectfully traverses this rejection as well. Again consider claim 1 as exemplary:

	CLAIM 1	REMARKS
1.	On a client device capable of operating using a plurality of operating systems on which a plurality of applications run, a method of downloading an operating system and an application which runs on the operating system, comprising:	No disclosure or suggestion in MacInnis of use of multiple operating systems. No teaching or suggestion of downloading an operating system. No suggestion of an ability to run multiple operating systems.
2.	a boot code of the client device providing a menu of selections representing a plurality of available applications including said application, wherein the boot code is incapable of running said application;	MacInnis has a boot code, but the boot code is used to update an operating system. No teaching or suggestion of the claim language as stated.
3.	receiving a signal representing a user's selection of said a desired application;	MacInnis only discloses that the user can select an application or OS for updating. As best determined, such applications are already loaded (as is the Operating System) and are to be

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		updated.
4.	responsive to receiving the signal, the boot code activating a download manager of the client device; the download manager managing a download of the operating system associated with the ~~desired~~ application and the ~~desired~~ application in a manner transparent to the user with no input from the user. further comprising:	No teaching or suggesting of download of an operating system associated with the selected application. Note col. 6, lines 49-60, if terminal 313 determines that a current version of an application program requires a new OS, the new OS is not loaded – instead, an older compatible version of the application program is loaded. This is directly contrary to Applicant's claimed invention and in fact can be considered to teach away
5.	connecting to a service provider;	
6.	downloading the operating system associated with the ~~desired~~ application from the service provider. wherein the operating system associated with the application is not already installed on the client device at a time of the downloading;	As amended, note that the OS is already installed in MacInnis – there is no suggestion that it can be otherwise. See 4 above, in fact, there is no download of an upgraded OS if needed for the application – instead, an earlier compatible application is downloaded. The application and OS are installed and updated independently.
7.	downloading the ~~desired~~ application; and	In MacInnis, this will only happen if the existing OS can run the application.
8.	installing and executing the operating system and the ~~desired~~ application.	Any execution of the operating system is execution of the user's existing operating system.

Similar arguments can be made for the remaining independent claims. Thus, it is believed clear that MacInnis fails to teach or suggest the present claims. In fact, MacInnis teaches that if the currently installed OS does not support the latest application version, a download of the application will consist of download of an earlier version of the application program. Clearly, this is not only a teaching away from Applicant's claimed invention, but in fact evidence of the conventional thinking that the OS is master and the software is selected based upon the existing OS.

Regarding the rejection of claims 2-9, 11-18 and 26, each of the rejections presented in the current Office Action depend upon either the Heath reference or the MacInnis reference of record. In each case, Heath or MacInnis is used erroneously in the same manner as in the rejection of the independent claims. Thus, the above

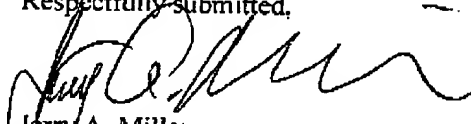Appl. No. 09/767,333   16

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distinctions noted in connection with the independent claims, are equally applicable. It is believed unnecessary to individually address the shortcomings in the remaining obviousness rejections of the dependent claims. Failure to address each point found in the Office Action should not be interpreted as accession to the Examiner's position. However, in view of the clear deficiencies noted in the Heath reference, individual discussion of each point is believed unnecessary. Reconsideration and allowance of all claims is respectfully requested at an early date.

If the Examiner believes that there are any issues which have not been resolved, or if there are any questions about this filing, a telephone call to the undersigned is respectfully solicited.

With this amendment, the application is believed to be in condition for allowance and a favorable response at an early date is earnestly solicited.

Respectfully submitted,

Jerry A. Miller
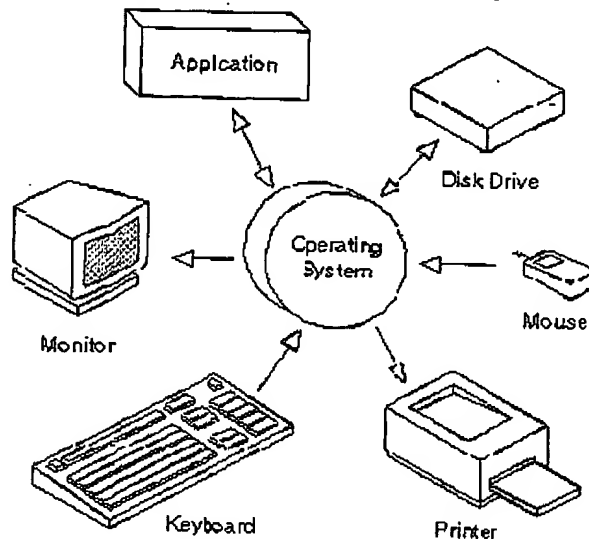Registration No. 30,779

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APPENDIX

http://www.webopedia.com/TERM/o/operating_system.html

The most important **program** that **runs** on a **computer**. Every general-purpose computer must have an **operating system** to run other **programs. Operating systems** perform basic tasks, such as recognizing **input** from the **keyboard**, sending **output** to the **display screen**, keeping track of **files** and **directories** on the disk, and controlling **peripheral devices** such as **disk drives** and **printers**.

For large systems, the operating **system** has even greater responsibilities and powers. It is like a traffic cop – it makes sure that different programs and **users** running at the same time do not interfere with each other. The operating system is also responsible for **security**, ensuring that unauthorized users do not **access** the system.

Operating systems can be classified as follows:

- **multi-user** : Allows two or more users to run programs at the same time. Some operating systems permit hundreds or even thousands of concurrent users.
- **multiprocessing** : **Supports** running a **program** on more than one **CPU**.
- **multitasking** : Allows more than one program to run concurrently.
- **multithreading** : Allows different parts of a single program to run concurrently.
- **real time**: Responds to input instantly. General-purpose operating systems, such as **DOS** and **UNIX**, are not real-time.

Operating systems provide a **software platform** on top of which other programs, called *application programs*, can run. The application programs must be written to run on top of a particular operating system. Your choice of operating system, therefore, determines to a great extent the applications you can run. For **PCs**, the most popular operating systems are DOS, **OS/2**, and **Windows**, but others are available, such as **Linux**.

As a user, you normally interact with the operating system through a set of **commands**. For example, the DOS operating system contains commands such as COPY and RENAME for **copying** files and changing the **names** of files, respectively. The commands are accepted and **executed** by a part of the operating system called the **command processor** or command line interpreter. **Graphical user interfaces** allow you to enter commands by pointing and **clicking** at **objects** that appear on the screen.

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http://whatis.techtarget.com/definition/0,,sid9_gci212714,00.html
operating system

An operating system (sometimes abbreviated as "OS") is the program that, after being initially loaded into the computer by a **boot** program, manages all the other programs in a computer. The other programs are called *applications* or **application programs**. The application programs make use of the operating system by making requests for services through a defined application program interface (**API**). In addition, users can interact directly with the operating system through a user interface such as a command language or a graphical user interface (**GUI**).

An operating system performs these services for applications:

- In a **multitasking** operating system where multiple programs can be running at the same time, the operating system determines which applications should run in what order and how much time should be allowed for each application before giving another application a turn.

- It manages the sharing of internal memory among multiple applications.

- It handles input and output to and from attached hardware devices, such as hard disks, printers, and dial-up ports.

- It sends messages to each application or interactive user (or to a system operator) about the status of operation and any errors that may have occurred.

- It can offload the management of what are called *batch* jobs (for example, printing) so that the initiating application is freed from this work.

- On computers that can provide parallel processing, an operating system can manage how to divide the program so that it runs on more than one processor at a time.

All major computer platforms (hardware and software) require and sometimes include an operating system. **Linux, Windows 2000, VMS, OS/400, AIX,** and **z/OS** are all examples of operating systems.

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Microsoft Computer Dictionary – 5th edition, 2002

operating system n. The software that controls the allocation and usage of hardware resources such as memory, central processing unit (CPU) time, disk space and peripheral devices. The operating system is the foundation software on which applications depend. Popular operating systems include Windows 98, Windows NT, Mac OS, and UNIX. *Acronym:* OS. *Also called:* executive

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